Amendments to the Specification:

Please replace on page 30, the paragraph starting with "In preferred embodiments..." with the following amended paragraph:

In preferred embodiments of the invention, a stabilized four-way complex can be detected with a combination of a labeled tracer molecule and a detection molecule as described in U.S. application serial number 10/071,299 ~~(attorney docket no. 10752-014-999)~~ which is hereby incorporated by reference in its entirety. Briefly, a tracer molecule comprises a stable or immobile four-way complex. Stable or immobile four-way complexes of oligonucleotides include those described in Shida *et al.*, 1996, *J. Biochem.* 119:653-658 and in Pikkemaat *et al.*, 1994, *Biochemistry* 33:14896-14907, the contents of which are hereby incorporated by reference in their entireties. The tracer molecule also comprises a detectable label. The detectable label can be any label that is capable of generating a signal that can be detected by methods known to those of skill in the art. Preferably, the signal can be sensitive to the binding of the tracer molecule by the detection molecule. In particular, the signal from a tracer molecule bound by a detection molecule should be distinguishable from the signal from an unbound tracer molecule.

Please replace on page 30, the paragraph starting with "To detect a stabilized four-way complex..." with the following amended paragraph:

To detect a stabilized four-way complex with a tracer molecule (described in U.S. application serial number 10/071,299, ~~attorney docket no. 10752-014-999~~), the detection molecule can be contacted with the nucleic acids in a solution comprising a tracer molecule. The detection molecule can be contacted with the nucleic acids under conditions in which the detection molecule is capable of selectively binding the tracer molecule or a four-way complex. If the nucleic acids are capable of forming a stabilized four-way complex, the stabilized four-way complex can compete with the tracer molecule for binding by the detection molecule thereby altering the signal from the tracer molecule. The change in signal of the tracer molecule can indicate the presence of a stabilized four-way complex. Other methods of detecting stabilized four-way complexes will be apparent to those of skill in the art and can be used in the methods of the present invention.

Please replace the paragraph beginning at page 7, line 5 with the following amended paragraph:

~~FIG. 1 provides~~ FIG. 1A and FIG. 1B provide an illustration of the preparation of a typical partial duplex of nucleic acid by PCR and formation of four-way complexes **C1**, **C2**, **C3**, and **C4**, which are then subject to branch migration conditions; FIG. 1A illustrates that if there is no mismatch between sequences **A** and **B**, each of the four complexes **C1**, **C2**, **C3**, and **C4** resolves into duplexes; and FIG. 1B illustrates that if there is a mismatch or mismatches between sequences **A** and **B**, each of the four complexes **C1**, **C2**, **C3**, and **C4** forms a stabilized four-way complex;

Please replace the paragraph beginning at page 7, line 12 with the following amended paragraph:

~~FIG. 3 provides a photograph~~ FIG. 3a and FIG. 3b provide photographs of a gel electrophoresis analysis of genomic DNA assayed for the genotype of a polymorphism according to conventional techniques. FIG. 3a presents eight samples amplified with PCR primers F-1(T1-1 + T2-1) in lanes 1-8, respectively. FIG. 3b presents eight samples amplified with PCR primers F-2(T1-1 + T2-2) in lanes 1-8, respectively.

Please replace the paragraph beginning at page 7, line 16 with the following amended paragraph:

~~FIG. 4 provides a photograph~~ FIG. 4a and FIG. 4b provide photographs of a gel electrophoresis experiment illustrating that impeding branch migration of a four-way complex depends on the nature of mismatches. FIG. 4a presents eight samples with the a indicated mismatches amplified with PCR primers F-1(T1-1 + T2-1) in lanes 1-8. FIG. 4b presents eight samples with the a indicated mismatches amplified with PCR primers F-2(T1-1 + T2-2) in lanes 1-8.

Please replace the paragraph beginning at page 7, line 6 with the following amended paragraph:

~~FIG. 6 provides a photograph~~ FIG. 6A, FIG. 6B and FIG. 6C provide photographs of a gel electrophoresis experiment illustrating the multiple mismatches improve impeding of branch migration and allow scoring of individual SNPs even in small amplicons[;]. FIG. 6A shows that introduction of one extra A-T mismatch just 5' of the SNP (mm1) results in elimination of the differences in inhibitory effects of various mismatches at the SNP position for both 97 and 67 bp amplicons. FIG. 6B shows that second mismatches just 3' of the SNP (mm1+6) and 4

nucleotides from the first mismatch (mm1+2) proved to be too much in that resulted in the appearance of HJ band in A/A and G/G homozygotes. FIG. 6C shows that three remaining combinations (mm1+3, 1+4 and 1+5) appeared to be acceptable judging by the gel picture: uniform HJ band intensity for various SNPs and its absence in the homozygotes.